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REMARKS

Claims 66-73 were indicated to be allowable in the first Office Action; only minor clarifying amendments are being made to these claims. New claims 84-86 are dependent upon two of these allowed system claims. Support for claim 84 is found at page 13, lines 33-36, and support for claims 85 and 86 is found in FIG. 6 of the drawings. New claims 87-93 are dependent on allowed method claims. Claims 87-91 find support in now canceled claims 79-83. New claim 92 finds support on page 15, line 28 of the description, and new claim 93 finds support in FIG. 6 of the drawing.

New claim 94 is patterned after allowed claim 66 and finds support therein. New claim 95 finds support in allowed claim 67, and new claims 96 and 97 are similar to claims 91 and 92. As a part of this amendment, the claims that were withdrawn have now been canceled without prejudice to their being submitted as part of a divisional application.

Claim 98 is a rewritten version of claim 45 that has been canceled. It finds support in original claim 45 and in the structure set forth in FIG. 1 as described in detail on page 6 of the specification. New claim 99 is illustrated in FIG. 1 of the drawing; new claim 100 finds support at page 6, lines 22 - 28 of the specification.

It is submitted that new claim 98 would not be obvious on the basis of the combination of references applied against original claim 45; more specifically, the recitations of the claim are not taught by the disclosure of U.S. Patent No. 5,171,767 to Buckley et al. (hereinafter Buckley) in view of U.S. Patent No. 5,690,830 to Hotani et al. (hereinafter Hotani). Buckley shows an ultrafiltration arrangement for recovering polymer as a product from a waste water stream generated during the production of latex. A pair of UF cartridges are provided; the permeate from the cartridges is merely discharged through a valve either to drain or to reuse. The Examiner speaks of feed diverter valves 18 or 19; however, no description of the function of those valves can be found in the text. As far as can be discerned from the drawing, these two valves would merely appear to isolate the entire filtration system from the feed pump and allow the pump to discharge directly back into the main tank 4. It is recognized that there is disclosure in column 10 with regard to some type of reverse flow/recycle; however, there is no explanation as to precisely how this would be carried out with reference to the drawing. Moreover, it must be remembered that this is a

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hollow fiber type filtration unit, and the description merely describes building up pressure outside the membrane fibers so that it is approximately equal to the average pressure in the fiber lumens so as to then cause some reverse flow.

It is submitted that, upon reconsideration, the Examiner should find this patent is not truly pertinent to the subject matter being claimed and that it really adds nothing to the disclosure of the Examiner's secondary reference. Hotani discloses three different systems for waste water treatment using a separation membrane cartridge which can be a spiral-wound module. In the FIG. 2 embodiment, as the Examiner points out, Hotani uses an air compressor for to supply compressed air into the liquid waste water stream being pumped to the module to clear out both the feedline 22 and the permeate side (via supply of air also through the line 42) so as to remove clogging; all of this flow is directed back to tank 1 through the concentrate return line 32, which contains no valve.

It is submitted that in view of the foregoing, the combination of these two references, even if they were pertinent to each other, simply fails to teach the recitations of new claim 98 which recites a feed diverter valve for controlling flow either to an inlet to the element or to drain, a concentrate diverter valve for controlling flow out of the concentrate outlet from the element, and means for adjusting the feed and concentrate diverter valves during backflushing. Thus claim 98 should be allowable, and dependent claims 99 and 100 should likewise be allowable. It is noted further that claim 100 specifies that a conduit interconnects the diverter valves so that fluid can be delivered into the second outlet at the top of the element during backflushing, which is a further feature clearly absent from either of these references.

In view of the allowance of claims 66-73, it is submitted that the fact that new claims 84-97 are either (1) dependent on those claims, (2) or very closely patterned after those claims, should render them similarly allowable. Moreover, in the absence or more pertinent prior art, it is submitted that new claims 98 - 100 should likewise be allowed; thus, it is believed that this application

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has now been placed in condition for allowance. Accordingly, it is believed that the issuance of a Notice of Allowance is in order, and such action is courteously solicited.

Respectfully submitted,  
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I hereby certify that this paper is being sent via facsimile to 703.872.9306 to the United States Patent and Trademark Office on December 15, 2003.

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Date

  
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